Affidavit of Dr. Thomas Fowlkes

1. My name is Thomas Fowlkes, M.D. I am over eighteen (18) years of age and suffer no legal disabilities. I give this affidavit based on my own personal knowledge.
2. I have been asked by counsel for Plaintiff in the matter of The Estate of Cynthia Mixon vs. Wilkinson County et al. pending in Federal District Court in the Middle District of Georgia to provide this affidavit to supplement the information provided in my Expert Report and deposition testimony.
3. As I stated in my Expert Report, it is my opinion to a reasonable degree of medical certainty that Ms. Mixon died of drug withdrawal, specifically benzodiazepine and/or opiate withdrawal. Ms. Mixon died during a seizure and it is my opinion to a reasonable degree of medical certainty that the seizure was brought on by benzodiazepine withdrawal. However, given that Ms. Mixon was clearly also suffering from significant opiate withdrawal, it is also possible that the seizure which caused Ms. Mixon's death was brought about by electrolyte derangements secondary to dehydration from opiate withdrawal. Given

that the medical examiner did not test Ms. Mixon's vitreous fluid for electrolyte levels, this possibility cannot be determined to be causative or excluded.

4. To arrive at the cause of Ms. Mixon's death I used the differential diagnosis methodology, as well as a review of Ms. Mixon's medical records, the autopsy report and a review of the case file. A non-exhaustive list of the documents I reviewed includes the following: the autopsy report, Ms. Mixon's medical records from Navicent Health, Dr. Garner, Dr. Sachy, Gordon Drugs and Oconee Medical Center, the 96-page GBI file into the investigation of Ms. Mixon's death, which included written statements of Ms. Mixon's fellow inmates, interviews with jail staff and audio recordings of those interviews, depositions of all seven individuals who had been deposed at the time of my deposition and 212 pages of inmate medical records.

Differential diagnosis methodology is a systematic scientific method used by physicians to diagnose a disease or condition and to exclude other possible causes which may have a similar presentation. Differential diagnosis methodology is medically accepted and is a reliable means of coming to the diagnosis which is most likely and to

exclude other unlikely possibilities. In this way a physician considers all the possible causes of a condition and then examines each one considering the frequency with which it occurs in the population at hand, the severity of the condition and how the expected symptoms fit the case at hand. Each possible diagnosis is treated as a true-false hypothesis. To the extent that several conditions cannot be completely ruled out, the physician then creates a list in order of probabilities to rank the diagnoses according to which is most likely (and recognizing the possibility that two unrelated conditions could occur simultaneously).

Here I used differential diagnosis methodology as follows:

a. I excluded hypertensive cardiovascular disease as cause of death because Ms. Mixon had no blockages in her heart and she only had a mildly enlarged heart, which would be asymptomatic. Ms. Mixon technically carried a diagnosis of hypertensive cardiovascular disease, but the autopsy provided no support for the conclusion that this condition was the cause of Ms. Mixon's death. Also important is that Ms. Mixon's death was precipitated by a seizure. Seizure is not a symptom associated with hypertensive cardiovascular disease.

b. I excluded flu or infection because Ms. Mixon had recently stopped taking two classes of controlled substance medications that had been prescribed in high enough doses to reliably cause physical dependence and which would predictably lead to withdrawal syndromes when stopped. Those two classes of drugs are opiates and benzodiazepines. The symptoms Ms. Mixon displayed while in jail were consistent with classic opiate and benzodiazepine withdrawal symptoms. I also excluded flu or infection because several symptoms are not consistent with flu or infection – namely, feeling like her heart was going to explode, which is generally not associated with flu or infection, but indicates the rebound anxiety of benzodiazepine withdrawal. In addition, seizure is not associated with flu or infection.

c. I developed the opinion that Ms. Mixon was suffering from benzodiazepine and opiate withdrawal because those disorders follow a predictable course:

i. Opiate withdrawal develops within approximately 24 hours of stopping use of most opiates. It manifests as nausea, vomiting, diarrhea, muscle and abdominal cramping and severe malaise. When death occurs, it is due to dehydration secondary to vomiting and

diarrhea, which leads to electrolyte derangements and seizure or arrhythmia.

ii. Benzodiazepine withdrawal develops within a few days of stopping benzodiazepines. The most prominent symptom of benzodiazepine withdrawal is rebound anxiety. When death occurs in the setting of benzodiazepine withdrawal it is most often secondary to seizures.

iii. The symptoms of opiate withdrawal are well recognized in the medical literature. They are succinctly described in the Clinical Opiate Withdrawal Scale (COWS). (Reference 1) The symptoms of benzodiazepine withdrawal are summarized in the Clinical Institute Withdrawal Assessment- Benzodiazepine (CIWA-B). (Reference 2) I am well acquainted with these withdrawal syndromes not only from the medical literature but also from my experience treating many, many patients with them over the past 20 years. In addition, I regularly present educational sessions for other physicians on these controlled substances.

d. I also reviewed Ms. Mixon's medical history to rule out any other potential causes of death. Since her death was precipitated by a

seizure, I considered any other disorders for which seizures (and seizure death) are a common occurrence. While Ms. Mixon was prescribed Tegretol (an anti-seizure medication), it appears that this drug was prescribed "off-label" (N.B. meaning that it appears to have been prescribed for another condition such as chronic pain rather than a true seizure disorder). I am not aware of and a search did not reveal any evidence in the medical literature of seizure resulting from stopping taking Tegretol suddenly when one does not have a diagnosed seizure disorder. There is no indication in her records that she suffered from a seizure disorder, epilepsy or any other condition commonly associated with seizure and seizure death. Ms. Mixon did not have clinical signs of meningitis and the autopsy did not show evidence of meningitis. Likewise the autopsy ruled out that Ms. Mixon had a brain tumor, aneurysm or other intracranial pathology which would have been a potential cause of seizure.

e. Thus as a result of the differential diagnosis methodology I concluded that the most likely cause of Ms. Mixon's death was benzodiazepine withdrawal seizure. The only other cause of death I am not able to exclude on the record is opiate withdrawal, as I note in my report. I

could not exclude opiate withdrawal as a cause of death because opiate withdrawal may cause a seizure brought on by electrolyte derangements secondary to dehydration.

5. If Ms. Mixon had been seen by a medical professional at any point before she began seizing on Friday morning, January 30 2015, it is my opinion to a reasonable degree of medical certainty that she would not have died.

6. Any reasonable medical professional who encountered Ms. Mixon at any point after she began to exhibit symptoms on Wednesday evening would easily have determined that Ms. Mixon was suffering from drug withdrawal. Ms. Mixon was displaying classic signs of opiate withdrawal including vomiting, diarrhea, and lack of appetite in addition to classic signs of benzodiazepine withdrawal including headache, fatigue, loss of appetite, flushing or feeling of burning in the face, hands or feet and anxiety (such as a description that one's "heart was about to bust"). These are all well-known withdrawal symptoms. Drug dependence and withdrawal is very common among incarcerated persons. A reasonable medical provider would identify development of these symptoms within a few days of intake to a detention facility as

being due to drug withdrawal until proven otherwise. A reasonable provider would then inquire about Ms. Mixon's prior prescriptions and drug usage. A reasonable provider would have determined that she was on multiple drugs which cause physical dependence and which are dangerous if stopped abruptly.

7. A reasonable medical professional who encountered Ms. Mixon at any point after she began to exhibit symptoms on Wednesday evening would have, at a minimum, treated Ms. Mixon's withdrawal symptoms. He/she would have given symptomatic treatment for Ms. Mixon's vomiting and diarrhea, would have ensured she was taking in adequate fluids, and would have begun a benzodiazepine taper. It is my opinion to a reasonable degree of medical certainty that had this occurred Ms. Mixon would not have died.

8. Even if a medical professional who encountered Ms. Mixon was not aware of her specific prescription medications, any reasonable medical professional would still treat Ms. Mixon's symptoms. Given the number and severity of her withdrawal symptoms, symptomatic treatment of the vomiting, diarrhea and anxiousness that Ms. Mixon was experiencing would have more likely than not included

benzodiazepines in addition to medications for vomiting and diarrhea. These medications would have been adequate to prevent the seizure that ultimately caused Ms. Mixon's death. It is my opinion to a reasonable degree of medical certainty that Ms. Mixon would not have died if this had occurred.

9. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

References:

1. Wesson, D.R., & Ling, W. (2003). The Clinical Opiate Withdrawal Scale (COWS). *J Psychoactive Drugs*, 35(2), 253-9. As retrieved from https://www.drugabuse.gov/sites/default/files/files/ClinicalOpiateWithdrawalScale.pdf

2. *Benzodiazepine Withdrawal Scale (CIWA-B)* [PDF file]. Retrieved from https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/resources/benzodiazepine+withdrawal+scale+ciwa+b+client+sheet

1/24/2019

X Thomas D. Fowlkes, M.D.

Thomas D. Fowlkes, M.D.

Sworn to and subscribed before me
this 24 day of January, 2019.

Notary Public

STATE OF MISSISSIPPI NOTARY PUBLIC ID # 117493 ASHLEY FRYE Commission Expires Sept. 22, 2020 LAFAYETTE COUNTY